

This listing of claims will replace all prior versions and listings of the claims in this application:

Claims 1-20 (cancelled)

Claim 21 (currently amended) A method of removing contaminants from a container in a vehicle, said method comprising the steps of:

determining a flow direction of a first fluid through a container on a vehicle, which container is configured to facilitate heat transfer from the first fluid to a second fluid;

where said container has an inlet end and an outlet end and during operation of the vehicle, the first fluid flows only in one direction, which is from the inlet end to the outlet end;

coupling a filter system to the inlet end of the container;

pumping the first fluid in a primary cleaning flow direction ~~from the outlet end toward the inlet end, so that contaminants disposed in said container at a location nearer the inlet end than the outlet end are expelled from the container without traveling a distance within the container which is longer than one-half of a total travel distance of the first fluid flowing from said inlet end to said outlet end;~~

reversing a flow of said first fluid through said container;

resuming flow of the first fluid in said primary cleaning flow direction at a time within a predetermined reversal interval from when said step of reversing a flow is commenced;

wherein said predetermined reversal interval is less than 10 seconds; and,

repeating said steps of reversing and resuming such that said first fluid flows in a reverse direction for a cumulative reverse direction duration for no more than ten percent of a cumulative primary cleaning direction duration of first fluid flowing in said primary cleaning direction.

Claim 22 (currently amended) A method of claim 21 wherein said predetermined reversal interval is less than ~~one-fourth of one second~~; and,

said step of reversing a flow is accomplished with a compressed fluid ~~driven~~ valve.

Claim 23 (currently amended) A method of claim 22 wherein said compressed fluid ~~driven valve is driven by~~ compressed air.

Claim 24 (cancelled)

Claim 25 (currently amended) A method of claim 21 wherein said first fluid is transmission fluid;

~~said second fluid is engine coolant~~; and,

said container is a transmission fluid cooler.

Claim 26 (cancelled)

Claim 27 (new) A method of claim 25 wherein said second fluid is a fluid circulated around components of an engine of said vehicle.

Claim 28 (new) A method of claim 27 wherein said second fluid further is an engine coolant.

Claim 29 (new) A method of claim 22 wherein said step of reversing a flow is accomplished through a compressed fluid used to actuate a compressed fluid driven valve.

Claim 30 (new) A method of claim 29 wherein said compressed fluid driven valve causes said step of pumping said first fluid to reverse a flow direction through said container.

Claim 31 (new) A method of claim 22 further comprising the step of filtering said first fluid during said step of pumping the first fluid in a primary cleaning flow direction.

Claim 32 (new) A method of claim 31 wherein said step of filtering said first fluid is performed by a filter.

Claim 33 (new) A method of claim 32 wherein a direction of flow of said first fluid through said filter is constant.

Claim 34 (new) A method of removing matter from a reservoir in a vehicle, said method comprising the steps of:

providing a reservoir on a vehicle, which reservoir is configured to contain a first fluid which, with the aid of a pump, flows to a plurality of positions within said vehicle;

wherein, during operation of the vehicle, the first fluid flows only in one direction, between said plurality of positions;

coupling a filter system to receive said first fluid;

pumping the first fluid in a first flow direction;

stopping a flow of said first fluid in said first flow direction;

resuming flow of the first fluid in said first flow direction at a time within a predetermined interval;

wherein said predetermined interval is less than ten (10) seconds; and,

wherein a compressed second fluid is used in accomplishing said step of stopping a flow of said first fluid.

Claim 35 (new) A method of claim 34 wherein said step of stopping a flow of said first fluid is an inherent step in reversing a flow of said first fluid.

Claim 36 (new) A method of claim 35 wherein said compressed second fluid is used to actuate a compressed fluid driven valve.

Claim 37 (new) A method of claim 34 wherein said compressed second fluid is used to actuate a compressed fluid driven valve.

Claim 38 (new) A method of claim 34 wherein said compressed second fluid is compressed air.

Claim 39 (new) A method of claim 34 wherein said predetermined interval is less than five (5) seconds.

Claim 40 (new) A method of claim 39 wherein said predetermined interval is less than two (2) seconds.

Claim 41 (new) A method of claim 40 wherein said predetermined interval is less than one (1) second.

Claim 42 (new) A method of claim 34 wherein said first fluid is transmission fluid.

Claim 43 (new) A method of removing contaminants from transmission fluid in a vehicle, comprising the steps of:

providing a transmission cooler for exchanging heat between transmission fluid and engine coolant;

pumping said transmission fluid from said transmission cooler through a filter to remove contaminants and returning said transmission fluid to said transmission cooler;

temporarily stopping flow of said transmission fluid through said transmission cooler with the aid of compressed air; and

resuming flow of said transmission fluid through said transmission cooler after an interval of less than ten (10) seconds.

Claim 44 (new) A method of claim 43 wherein said step of temporarily stopping flow of said transmission fluid is an inherent step in reversing said flow of said transmission fluid through said transmission cooler.

Claim 45 (new) A method of claim 43 wherein a direction of flow of said transmission fluid remains constant despite said step of temporarily stopping flow of said transmission fluid.

Claim 46 (new) A method of claim 44 wherein a direction of flow of said transmission fluid remains constant despite reversing said flow of said transmission fluid through said transmission cooler.